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a. If letter or memo:
To: D. E. Williams, Dir., Reactor Div.
From: J. R. Horan Dir., H&S Div.
Subject: SNAPTRAN-1 TEST SERIES PROPOSAL NO. 5, REV 1.

b. If report:
Title:

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5. Summary (2-3 lines indicating the major subject(s) of the document): Letter independently calculates prospective dose to TSF (nearest onsite population) and suggests changes in weather restrictions planned for the test. The letter also requires that the test cell doors be closed during the test.

6. Name and telephone number of person completing form:	7. Organization:	8. Date:
Burton R. Baldwin (208) 525-0203	Lockheed Idaho Technologies Co.	April 20, 1995

[ ] Check here if a copy of the document is being sent to Headquarters.

HUMAN RADIATION EXPERIMENTS

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DOCUMENT TITLE: SNAPTRAN-I TEST SERIES PROPOSAL NO. 5 REVISION I
CROSS REFERENCES:
ITEMS OF INTEREST:

D. E. Williams, Director
Reactor Division

John R. Horan, Director
Health and Safety Division

SNAPTRAN-I TEST SERIES PROPOSAL NO. 5 REVISION I

HSHP:WPG

The Health and Safety Division reviewed the subject proposal. It is our opinion that the test series may be conducted with no undue hazards to personnel. We have the following two comments:

1. An independent calculation of the doses at TSF which might be expected to result from the instantaneous release of 100% of the fission products formed during a 20 MW-sec power excursion in the IET Test Cell yielded the following results:

Stability Class	Inhalation Thyroid Dose	Cloud Gamma Dose
Strong Inversion	1.9 rad	200 mr
Weak Inversion	90 mrad	50 mr
Weak Lapse	3 mrad	10 mr
Strong Lapse	0.3 mrad	1 mr

These calculations considered decay and initial diffusion within the Test Cell but still represent conservative dose estimates.

In view of very low doses which might result from an accident during lapse conditions, it would appear that the meteorological controls recommended by PPCO are unnecessarily restrictive. As an alternative we would recommend these tests not be performed under inversion conditions with the wind blowing into the sector encompassed by 150° through 180° to 270°. This restriction could be expected to result in fewer programmatic delays and would obviate the need for an evacuation of the TAN area in the event of an accident.

2. The Test Cell doors must be kept closed during all reactor operations.

cc: E. K. Loop

HSHP	HSOS	HS
WPGammill:dc	RVBatie	JRHoran
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